Amendments to the Claims

This listing of claims shall replace all prior versions, and listings, of claims in the instant Application.

1. (Currently Amended) An interpositional arthroplasty implant for use in repairing ginglymus joints such as the joints of the ankle, ~~comprising~~ consisting essentially of a ~~single piece~~ monolithic tibiotalar implant ~~that provides~~ having a first major surface adapted to be positioned against a tibia~~, the~~ and shaped to allow the tibia ~~being allowed~~ to articulate across the first major surface~~.~~; and a second major surface adapted to be positioned against a talus, and a bead shaped structure proximate to the implant's anterior side sized to engage the neck of the talus.

2. (Currently Amended) An implant according to claim 1 wherein the tibiotalar implant further comprises one or more additional external structures adapted to improve retention of the implant within the joint site.

3. (Currently Amended) An implant according to claim 2 wherein the bead shaped structure ~~comprises an~~is integral ~~bead shaped structure proximate~~with the implant's anterior side ~~adapted to engage a neck of the talus~~.

4. (Original) An implant according to claim 1 wherein the implant comprises a biomaterial.

5. (Original) An implant according to claim 4 wherein the biomaterial is a polyurethane.

6. (Original) An implant according to claim 5 wherein the polyurethane is biocompatible with respect to cytotoxicity, sensitization, genotoxicity, chronic toxicity, and carcinogenicity.

7. (Original) An implant according to claim 5 wherein polyurethane has a Shore hardness of at least about 60 D or less.

8. – 18. Cancelled.

19. (Previously Presented) A method of repairing a tibiotalar joint, comprising the steps of providing and implanting an implant according to claim 1, the implant being inserted through an incision anterior to the tibiotalar joint.

20. (Previously Presented) An implant according to claim 1 inserted into a ginglymus joint, the ginglymus joint being a tibiotalar joint, the single piece implant's first major surface positioned against the tibia, its second major surface positioned against the talus, and an integral bead shaped structure proximate the implant's anterior side engaging a neck of the talus.

21. Cancelled.

22. (Currently Amended) A device for implantation into an ankle joint space within the body of a mammal, the device consisting essentially of ~~comprising~~ a ~~single piece~~ monolithic structure fabricated from a biocompatible, biodurable material that is adapted to be inserted into the joint compartment, the ~~single piece~~ monolithic structure including a first major surface adapted to be positioned against a tibia, such that the tibia ~~being allowed to~~ can articulate across the first major surface, and a second major surface adapted to be positioned against a talus, wherein the implanted device is substantially free of anchoring portions that need to be attached to the bone, cartilage, ligaments or other tissue, ~~yet by its design is~~ wherein the implanted devise is shaped so that ~~capable of being used with~~ it has minimal translation, rotation, or other undesired movement or dislocation within or from the joint space.

23. Cancelled.

24. (Previously Presented) A device according to claim 22 wherein stability of the device within the joint space is provided by the congruency of the device to the talus.

25. (Currently Amended) An interpositional arthroplasty device for use in repairing joints of the ankle, ~~comprising~~ consisting essentially of a ~~single piece~~ monolithic interpositional tibiotalar implant that provides a first major surface adapted to be positioned against a tibia~~, the tibia being~~ shaped to allow~~ed~~ the tibia to articulate

across the first major surface, and a second major surface adapted to be positioned against a talus, wherein the implant comprises an integral bead shaped structure proximate its anterior side adapted to engage the neck of a talus to improve fixation to the talus, wherein the monolithic implant comprises a polyurethane that includes both hard and soft segments.